

CLAIM AMENDMENTS

1-9. (Canceled)

10. (New) A method for energy management of an air-conditioning unit in a motor vehicle, the air-conditioning unit having a plurality of air-conditioning compressors, comprising:

allocating priorities to each of at least two air-conditioning compressors of the air-conditioning unit,

determining whether an engine of the motor vehicle is newly started, in the idling mode, or in a full load mode, and therefore an acceleration bit by which the air-conditioning compressors have been switched off is set,

executing a conventional air-conditioning unit regulating process when the engine is not newly started, the engine is not in the idling mode, and the engine is not in the full load mode, and

actuating the air-conditioning compressors in a priority sequence determined by the priorities allocated, with actuation of each of the air-conditioning compressors being offset by a time, when the engine is newly started, the engine is in the idling mode, or the engine is in the full load mode.

11. (New) The method of claim 10, wherein the time is a respective predefined time which is dependent on at least one of a design, a size, an

ambient temperature, and a coolant pressure of at least one of the air-conditioning compressors.

12. (New) The method of claim 10, wherein the time is a predefined time of approximately 3 seconds.

13. (New) The method of claim 10, wherein the priorities are allocated in such a way that an air-conditioning compressor which is assigned to a front vehicle region has a higher priority than an air-conditioning compressor which is assigned to a rear vehicle region.

14. (New) The method of claim 11, wherein the priorities are allocated in such a way that an air-conditioning compressor which is assigned to a front vehicle region has a higher priority than an air-conditioning compressor which is assigned to a rear vehicle region.

15. (New) The method of claim 10, and further comprising checking whether an air-conditioning unit request signal is present when the engine is in the idling mode, simultaneously outputting an air-conditioning compressor actuating signal and an anticipated air-conditioning compressor torque to an engine control device when the air-conditioning unit request signal is present, calculating a load increase signal as a function of the air-conditioning compressor torque with the engine control device and outputting the load increase signal to

the engine after a predetermined time, and outputting a compressor flow which corresponds to the load increase signal with a switch-on delay time by the engine to the air-conditioning compressor, firstly for an air-conditioning compressor with the highest priority, and then, after a predefined time, for an air-conditioning compressor with the next highest priority.

16. (New) The method of claim 11, and further comprising checking whether an air-conditioning unit request signal is present when the engine is in the idling mode, simultaneously outputting an air-conditioning compressor actuating signal and an anticipated air-conditioning compressor torque to an engine control device when the air-conditioning unit request signal is present, calculating a load increase signal as a function of the air-conditioning compressor torque with the engine control device and outputting the load increase signal to the engine after a predetermined time, and outputting a compressor flow which corresponds to the load increase signal with a switch-on delay time by the engine to the air-conditioning compressor, firstly for an air-conditioning compressor with the highest priority, and then, after a predefined time, for an air-conditioning compressor with the next highest priority.

17. (New) The method of claim 13, and further comprising checking whether an air-conditioning unit request signal is present when the engine is in the idling mode, simultaneously outputting an air-conditioning compressor actuating signal and an anticipated air-conditioning compressor torque to an

engine control device when the air-conditioning unit request signal is present, calculating a load increase signal as a function of the air-conditioning compressor torque with the engine control device and outputting the load increase signal to the engine after a predetermined time, and outputting a compressor flow which corresponds to the load increase signal with a switch-on delay time by the engine to the air-conditioning compressor, firstly for an air-conditioning compressor with the highest priority, and then, after a predefined time, for an air-conditioning compressor with the next highest priority.

18. (New) The method of claim 15, and further comprising checking whether a deactivating switch for deactivation of the air-conditioning unit has been operated during the switch-on delay time, switching off all the air-conditioning compressors of the associated cooling circuit and again determining whether the engine is newly started when the deactivating switch has been operated, and, otherwise, when an air-conditioning compressor with the next highest priority is present, again outputting the air-conditioning compressor actuating signal and the anticipated air-conditioning compressor torque to the engine control device.

19. (New) The method of claim 16, and further comprising checking whether a deactivating switch for deactivation of the air-conditioning unit has been operated during the switch-on delay time, switching off all the air-conditioning compressors of the associated cooling circuit and again determining

whether the engine is newly started when the deactivating switch has been operated, and, otherwise, when an air-conditioning compressor with the next highest priority is present, again outputting the air-conditioning compressor actuating signal and the anticipated air-conditioning compressor torque to the engine control device.

20. (New) The method of claim 17, and further comprising checking whether a deactivating switch for deactivation of the air-conditioning unit has been operated during the switch-on delay time, switching off all the air-conditioning compressors of the associated cooling circuit and again determining whether the engine is newly started when the deactivating switch has been operated, and, otherwise, when an air-conditioning compressor with the next highest priority is present, again outputting the air-conditioning compressor actuating signal and the anticipated air-conditioning compressor torque to the engine control device.

21. (New) The method of claim 10, and further comprising switching the air-conditioning compressor off over a predetermined time period when the acceleration bit is set, monitoring whether the acceleration bit remains set, speeding up the air-conditioning compressor immediately and with a predefined gradient when the acceleration bit is no longer set, ending the deactivation of the air-conditioning compressor over the predetermined time period and powering up the air-conditioning compressor again with the predefined gradient when the

acceleration bit remains set, and repeating the switching, monitoring, speeding up and ending acts for the air-conditioning compressor with the next highest priority.

22. (New) The method of claim 15, and further comprising switching the air-conditioning compressor off over a predetermined time period when the acceleration bit is set, monitoring whether the acceleration bit remains set, speeding up the air-conditioning compressor immediately and with a predefined gradient when the acceleration bit is no longer set, ending the deactivation of the air-conditioning compressor over the predetermined time period and powering up the air-conditioning compressor again with the predefined gradient when the acceleration bit remains set, and repeating the switching, monitoring, speeding up and ending acts for the air-conditioning compressor with the next highest priority.

23. (New) The method of claim 18, and further comprising switching the air-conditioning compressor off over a predetermined time period when the acceleration bit is set, monitoring whether the acceleration bit remains set, speeding up the air-conditioning compressor immediately and with a predefined gradient when the acceleration bit is no longer set, ending the deactivation of the air-conditioning compressor over the predetermined time period and powering up the air-conditioning compressor again with the predefined gradient when the acceleration bit remains set, and repeating the switching, monitoring, speeding

up and ending acts for the air-conditioning compressor with the next highest priority.

24. (New) The method of claim 21, and further comprising determining the external temperature before switching the air-conditioning compressor off and deciding whether the external temperature is above a predetermined threshold value, selecting the predetermined time period as a function of whether the external temperature is above or below the threshold value, and determining the gradient during speeding up or powering up of the air-conditioning compressor depending on whether the external temperature is above the threshold value.

25. (New) The method of claim 22, and further comprising determining the external temperature before switching the air-conditioning compressor off and deciding whether the external temperature is above a predetermined threshold value, selecting the predetermined time period as a function of whether the external temperature is above or below the threshold value, and determining the gradient during speeding up or powering up of the air-conditioning compressor depending on whether the external temperature is above the threshold value.

26. (New) The method of claim 23, and further comprising determining the external temperature before switching the air-conditioning compressor off

and deciding whether the external temperature is above a predetermined threshold value, selecting the predetermined time period as a function of whether the external temperature is above or below the threshold value, and determining the gradient during speeding up or powering up of the air-conditioning compressor depending on whether the external temperature is above the threshold value.

27. (New) The method of claim 10, wherein the determining acts are carried out in a different sequence.

28. (New) The method of claim 10, wherein the determining acts are carried out simultaneously.